April 7, 2003

Before the: FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of: *Second Periodic Review of the Commission's Rules and Policies Affecting the Conversion To Digital Television* — *MB Docket No. 03-15* *RM 9832*

Marlene H. Dortch, Secretary,
Federal Communications Commission

I am pleased to submit these comments to the Federal Communications Commission. Since 1989, I have been involved in the development and implementation of v-chip technology in Canada, the United States, and most recently in Brazil. V-chip functionality is two-fold: (i) to protect children by limiting their exposure to the potentially harmful influences of certain types of media content, and (ii) to provide a tool to select appropriate media content for children. The CEA filed a petition for rulemaking over 3 years ago, asking the FCC "*to incorporate EIA-766-A ("US RRT and CADs for the Transport of Content Advisory information using PSIP") into Section 15.120 of FCC rules in order to establish uniformity for v-chip compliance in digital receivers*". You seek comment on this petition and other issues - I will comment on each of these in turn.

1) PSIP: *"... whether the Commission should adopt the provisions of PSIP that require all digital television broadcasters to transmit v-chip rating information using PSIP"*

With respect to v-chip, PSIP allows content advisory descriptors ("CADs") to be transmitted in the Transport Stream ("TS") of the DTV signal. PSIP also carries Rating Region Tables ("RRTs"), which describe the content advisory rating systems being used. Use of RRTs support future modifications to content advisory rating systems. It is possible for a program to have several ratings linked to it, especially in situations where signals may be received across national boundaries. Program blocking is achieved using two steps: first, rating system tables are built based on the matrix of information defined in the RRTs. Second, program rating(s) are extracted from the transmitted CADs, interpreted based on the corresponding RRTs, and compared to the user's rating preferences in order to determine whether a program should be blocked.

PSIP should be used exclusively for the transmission of CADs since the programming stream does not carry RRTs, and RRTs are needed: (i) to define and specify the content advisory rating system(s) in use, and (ii) to support modifications to content advisory rating system(s). Any CADs received in the programming stream should be ignored. **The FCC should require the exclusive use of PSIP for the transmission of CADs in DTV transmissions.**

2*)* The CEA Petition: *"...including the adoption of particular standards that are necessary and appropriate, and the timing of any such mandate."*

EIA-766-A was published in Apr/2001 and specifies "*the exact syntax to be used to define the US and Canadian RRTs in accordance with A/65-A, as well as the exact syntax to be used for the CADs that convey the rating information. This standard does not indicate and is not meant to imply techniques or procedures for blocking at the DTV receiver."* The CEA published CEB12 ("Recommended PSIP Practice") in Sep/2002 to explain techniques and procedures for blocking at the DTV receiver. The recommended "*Content Advisory/Action*" is briefly outlined in section 8.3.6 of CEB12 as follows:

"*The RRT structure consists of multiple countries or regions defined by rating_region and rating_region_name_text, each of which has a number of dimensions defined by dimension_name_text, and each dimension has a number of values defined by abbrev_rating_value_text and rating_value_text. The event ratings indicated by the CAD may be given for any or all of the defined regions. An event without a CAD indicates that the rating value for any rating dimension defined in any rating region is zero for that event. A program can have several ratings linked to it, especially in situations where signals may be received across national boundaries. In the United States there is a special case for ratings, since the content advisory requirements are not strictly hierarchical. Therefore, devices designed to support the U.S. region should use the U.S. rating region system defined in EIA/CEA-766-A, and should disregard any broadcast RRT for that region. User setup tables and selections should take into account the complexities of the U.S. content advisory system along with the possibility that multiple ratings systems may be applicable to programs.*"

It is not clear to me why the *"special case for ratings*" in the US justifies the conclusion that *"therefore, devices designed to support the U.S. region... should disregard any broadcast RRT for that region"*, especially since EIA-766-A also states that "*receiver implementations should be designed to process updated versions of the Canadian RRT (version_number field other than zero)*". Receivers should be able to process newer versions of *all* RRTs whenever they are transmitted as per the A/65-A standard.

Most manufacturers are building digital receivers according to CEB12 and EIA-766-A, and have had ample time to comply with these standards. **EIA-766-A and CEB12 should be incorporated into Section 15.120 of FCC rules in order to establish a "baseline" level of uniformity for v-chip compliance in digital receivers.**

3*)* Flexibility: *"... how the Commission should ensure that flexibility to modify the content advisory rating system is maintained in any standard it adopts"*

I agree with the FCC that "*the ability to modify content advisory rating systems is beneficial*" and this should be an additional requirement for digital receivers. The recently issued A/65-B standard includes a number of revisions to the A/65-A standard. A/65-B states that "*RRTs shall be carried within the TS, except for the RRT corresponding to rating_region 0x01 (US + possessions).*

Interpretation in a receiver of the rating_region 0x01 RRT requires prior knowledge of EIA-766-A; therefore transmission is unnecessary. A future extension or replacement of the content advisory system for the US is possible by assignment of a new, different rating_region code and creation of new content for a RRT. A RRT for a given region shall be included in the TS if any CAD in use refers to that region, unless that region has explicit standards that define the rating system and the meaning of the values in the CAD."

As was the case for EIA-766-A, I fail to understand why "*interpretation in a receiver of the rating_region 0x01 RRT requires prior knowledge of EIA-766-A*" leads to the conclusion that *"therefore transmission [of the US RRT 0x01] is unnecessary."* I agree that it is not necessary to transmit version '0' of a RRT since digital receivers are usually shipped with all defined RRTs as the default setting. The *'version_number'* field in the RRT (defined in A/65-B) is the mechanism that is normally used to extend or replace a content advisory system currently in use, not the introduction of a different RRT. Whenever a RRT changes, a newer *'version_number'* of the RRT is transmitted using the prescribed syntax in A/65-B (this syntax has not changed from the original A/65 standard):

"version_number — *This 5-bit field is the version number of the RRT identified by combination of the fields* ***table_id*** *and* ***table_id_extension****. The* ***version_number*** *shall be incremented by 1 modulo 32 when any field in the RRT changes. The value of this field shall be the same as that of the corresponding entry in MGT."*

Perhaps A/65-B has proposed to use a new, different US RRT in order to ensure that the older US 0x01 RRT remains in tact for digital receivers that have not been designed to process newer versions of RRTs. If and when an extended RRT is implemented in the US, the older US 0x01 RRT could continue to be used by broadcasters so that existing digital receivers would not be rendered obsolete. An extended RRT carries some benefits because this structure would allow other organizations to rate programs and have their CADs transmitted in the TS as well.

An overlooked capability of the v-chip is that, while it can filter out inappropriate content for children, the v-chip can also act as a "beacon" for programs. Former PBS president Ervin Duggan once stated that, "I want to suggest an addition to the ratings system that has the potential to create 'welcome mats' for programs worth watching, not just warnings about what not to watch."

Additional rating systems could be used to 'recommend' programs for viewing, rather than flag programs for blocking. There are many organizations that promote and publicize television programming and many have developed their own rating and classification systems. Broadcasters, producers and the public could also make program recommendations to these organizations, thus ensuring that there is complete and open access to any such system(s). Ratings assigned by organizations could "unblock" a program that might otherwise be blocked by existing ratings.

The following rating system, developed by the hypothetical "*National Media Institute*", recommends programs for 5 age groups:

National Media Rating

1) Tot
2) Child
3) Tween
4) Teen
5) Adult

For example, a program could receive a 'TV-PG' rating according to the TV Parental Guidelines, but could also earn a 'Tween' label from the National Media Institute. If the user prefers to block 'TV-PG' programs, but also specifies 'Tween' programs for viewing, then this program (which would otherwise be blocked) would be viewable.

A/65-B (as well as all previous versions of A/65) completely specifies how rating system tables are built based on the matrix of information defined in the RRTs, but there is no guarantee that receivers are currently being designed to process RRTs. At the moment, CEB12 recommends that *"user setup tables and selections should take into account... the possibility that multiple ratings systems may be applicable to programs*" but there is no requirement as to the number of RRTs that receivers should be able to process. A/65-B indicates in Section 6.9.4 that *"Ratings may be given for any or all of the defined regions, up to a maximum of 8 regions per event."*

Complete flexibility can be achieved by assigning a new *rating_region* code for an extended US RRT. The ATSC should be instructed to assign a new *rating_region* code for an extended US RRT, and the FCC should require that digital receivers must be able to interpret this extended US *rating_region* code, and its associated RRT, if and when it becomes available. In addition, digital receivers should be designed to process a minimum of 8 RRTs.

4) Other Issues: *"... whether the Commission should specify other requirements for v-chip in digital television."*

Analog receivers 13" or larger are required to be equipped with v-chip technology. This decision was based mainly on the larger relative cost associated with integrating v-chip in smaller analog receivers. I do not believe that the cost of including v-chip in equivalent-sized digital receivers is cost-prohibitive. With the high quality available in digital screens, smaller screen sizes should become much more popular perhaps the most popular in the area of children's personal televisions.

The minimum size requirement should be removed for all digital receivers in the interests of protecting children.